

# Improving the Standard of Living and Health Status of the RW 07 Community Through Health Education

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## Abstract

Efforts are made in realizing the highest degree of public health as one of the investments for the development of productive human resources. Given some health problems that occur in society today such as hypertension and rheumatism. The purpose of this community service is to increase public knowledge about hypertension, rheumatism, and healthy living. The method used in this service is by using counseling, pre-test and post-test methods. There are several stages used in this activity, namely the pre-test stage, medical examination, counseling, and continued with the post test. The results obtained from this activity, namely from the results of the pre-test and post-test that have been carried out, it can be seen that the influence of education on knowledge and attitudes about hypertension and rheumatism as well as a balanced nutritional diet is very significant in order to improve the degree of health of the community in RW 07 tile village. The conclusion of this activity is that this community service activity has a very good impact on the community.

## A. Introduction

The population problem faced by Indonesia today is not only a large population with a relatively high Population Growth Rate, but also an uneven population distribution, a young age structure and low population quality in Indonesia, and the country of Indonesia has a high birth rate. Improving the quality of public health through the awareness process can be done through clean and healthy living programs. The implementation of healthy living programs is determined by the knowledge possessed by the community on healthy living programs. Better knowledge will foster people's awareness of healthy living (Rahmawati et al., 2022).

Increasing knowledge of healthy living is very necessary in people's lives, because it will have a good impact on public health (Barasche-Berdah et al., 2022). Efforts made in realizing the highest degree of public health as one of the investments for the development of productive human resources. According to research (Nugrahaeni & Permanasari, 2021) which states that the lack of public knowledge about health information so that health problems in the community are still a considerable problem.

Clean and healthy living behavior is a step that must be applied to achieve a good degree of health for everyone (Hermawan et al., 2022; Kusuma, 2022; Rizqoh et al., 2023). Based on the results of a survey conducted by students of the Ners Professional Program batch 29 of the Community and Family Station, Immanuel Bandung Health Institute, several health problems in Jayagiri Village were identified, especially in RW 07, which is from a total population of 754 people. The results of the survey are that all residents of RW 07 already have BPJS cards, there are 360 (48%) residents who suffer from hypertension, but only 160 people take hypertension medication regularly (44%), 200 people eat drugs not regularly (56%), there are

couples of childbearing age who do not use contraceptives as many as 180 households, and there are mothers who give birth but do not use health facilities 212 people.

The number of Heads of Families in RW 07 is 213 households, the number of people is 754 people consisting of 381 men while women are 373 people. 74.40% are of productive age. With an education level of elementary school graduates and equivalent to elementary school 34%, junior high school and equivalent to junior high school 23%, high school and equivalent to high school 36%, RW 07 has the main water source, namely PDAM clean water source. RW 07 residents have the largest livelihoods are self-employed, private employees and laborers. Given some health problems that occur in society today such as hypertension and rheumatism.

Hypertension is a condition when blood pressure is at 130/80 mmHg or more (Dasgupta & Zoccali, 2022; Li et al., 2021; Permata et al., 2021). Hypertension is also known as the "silent killer" because people with hypertension generally do not experience any symptoms until their blood pressure is too high and life-threatening (Marjina et al., 2020; Purnamasari & Meutia, 2023; Shrestha et al., 2021). Some symptoms that may be felt by people with hypertension include headaches, heart palpitations, chest pain, anxiety, blurred vision, and easy fatigue. Hypertension is divided into primary hypertension and secondary hypertension. Primary hypertension has no known cause, while secondary hypertension can occur due to several factors, such as kidney disease, sleep apnea, and alcoholism (Mazhar et al., 2023; Mirjat et al., 2020; Sudano et al., 2023). Treatment and prevention of hypertension can be done by living a healthy lifestyle, such as reducing salt intake, reducing alcohol consumption and fatty foods, and routinely checking blood pressure.

Rheumatism is an inflammatory condition in the joints due to autoimmune conditions, which is when the immune system turns to attack the joints of the body (Kondo et al., 2021). Rheumatism can cause damage to other organs, such as the heart, lungs, nervous system, kidneys, skin, and eyes. Some symptoms that may be felt by rheumatic sufferers include pain, stiffness, and swelling in the joints, fever, weakness, tightness, eye inflammation, and difficulty walking, bending, or standing. Rheumatism can increase the risk of problems with the heart, arteries, and inflammation of the sac that wraps the heart (Archana & Vinay, 2020; Hysa et al., 2021; Le & Kwon, 2021).

Based on the above problems, we carry out community service activities with the aim of "to increase public knowledge about hypertension, rheumatism, and healthy living". Through this service, it is hoped that it can realize a healthy and quality society.

## B. Research Methods

The implementation of community service will be carried out on September 12, 2023 from 08.00 – 14.00 in the RW 07 area, Jayagiri Village, Lembang District, West Bandung Regency. Tools used during service activities are LCD, laptop, marker, A4 paper, pen, and camera. The stages used during service are opening, pre-test, nutritional and blood pressure checks, rheumatic gymnastics, then continued with nutrition and blood pressure checks, then presentation of hypertension-related material, poster explanation, and ending with a post test.

The methods used in this community service activity are pre-test and post-test methods. Pre-test and post-test data collection using questionnaire sheets. The pre-test method is used to find out how far the public knows about hypertension and rheumatism. After the pre-test is carried out, a post test will be carried out which is a method to find out the improvement obtained by the community regarding hypertension and rheumatism after this service.

## C. Results and Discussion

This community service activity was carried out in RW 07, Jayagiri Village, Lembang District, West Bandung Regency. This service activity will be carried out on September 12, 2023. This service activity consists of several stages of activities, the first of which begins with the opening guided by the event mc. Then continued with the implementation of the pre test, this pre-test activity began by distributing questionnaire sheets to the community. The results of the pre-test on hypertension knowledge and how to prevent it show that most people are still unfamiliar with hypertension. Evident from the value of the pre-test results carried out are as follows:

- The value is between 70 – 100 only 5 people, the highest score of 82 is only 1 person.
- The value is below 70 as many as 18 people, which has a value of at least 35 only 1 person

After the pre-test activity, nutrition and blood pressure checks will be carried out. The results of the examination on community service showed the characteristics of RT 01 RW 07 residents carried out on 23 residents. The results obtained are broadly speaking, 65% of tile villagers suffer from hypertension, but are not obese, as evidenced by the measurement of BMI according to standards reaching 65% while waist circumference reaches 74%, but what needs to be observed is the measurement results of 3 other types, namely sedentary which states the results of 74% doing sedentary, smoking habits 74% and traditional snacks only 17%, A total of 83% have consumed ready-to-eat contemporary food and junk food. In addition to nutrition and blood pressure check-up activities, interspersed with rheumatic gymnastics which is reviewed by showing videos of rheumatic gymnastics. Then rheumatic gymnastics was carried out together with video guides that were aired.

After checking nutrition and blood pressure, material exposure activities will be carried out. This material presentation activity is carried out by providing knowledge about hypertension and rheumatism, which refers to blood pressure results. In addition, the knowledge provided is in the form of information on how to prevent and control hypertension. Material presentation activities are also interspersed with games and quis, which aim not to feel bored in the implementation of activities.

Then after the presentation of the material, it will be continued by carrying out a post test. The results of the post test obtained from this service activity, namely about knowledge and attitudes about hypertension and its prevention, showed significant progress in increasing knowledge with the following acquisitions:

- Scores below 70 there are 2 people with the lowest score of 65, while there are 2 people who do not take the post test because there are other tasks
- Scores above 70 there are 19 people with the highest score of 88 1 person and a value of 82 achieved by 6 people, a value of 76 achieved by 6 people and the lowest score of 71 achieved by 5 people

From the results of the pre-test and post-test that have been carried out, it can be seen that the influence of education on knowledge and attitudes about hypertension and rheumatism as well as a balanced nutritional diet is very significant in order to improve the degree of health of the community in RW 07 tile village. The community is expected to be able to carry out gymnastic activities, both hypertensive gymnastics and rheumatic gymnastics regularly, especially to reduce sedentary which is quite high value. The following is documentation of community service activities.



**Figure 1.** Joint Gymnastics Activities



**Figure 2.** Material Presentation Activities

This devotion is in line with the devotion carried out by (Suprapto & Arda, 2021) entitled "Community Empowerment Through Counseling on Clean and Healthy Living Behavior to Improve the Degree of Public Health" which states that there is an increase in community knowledge after this community service activity can have an impact on improving the degree of public health in the working area of the Barombong Health Center in Makassar City, among others, increasing public knowledge about PHBS behavior. In addition, this devotion is in line with the devotion carried out by (Hartaty & Kurni Menga, 2022) entitled "Community Empowerment through Counseling on Clean and Healthy Living Behavior to Improve the Degree of Public Health" which states that this community service activity can have an impact on improving the degree of public health in Barombong Village, among others, increasing public knowledge about PHBS behavior.

#### D. Conclusion

This community service activity has a very good impact on the community. From the results of the pre-test and post-test that have been carried out, it can be seen that the influence of education on knowledge and attitudes about hypertension and rheumatism is very significant. This community service activity also has an impact on improving the degree of public health in RW 07, one of which is increasing public knowledge about healthy living and how to prevent hypertension and rheumatism.

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#### References

Archana, C., & Vinay, P. (2020). Rheumatoid Arthritis: Etiology, Treatment and Animal Models. *Journal of Drug Delivery & Therapeutics*, 10(5), 290–298. <https://doi.org/10.22270/jddt.v10i5-s.4357>

Barasche-Berdah, D., Wetzler, S., Greenshtein, I., Greenberg, K. L., Leiter, E., Donchin, M., & Zwas, D. R. (2022). Municipal community centers as healthy settings: evaluation of a real-world health promotion intervention in Jerusalem. *BMC Public Health*, 22(1), 1–13. <https://doi.org/10.1186/s12889-022-14220-7>

Dasgupta, I., & Zoccali, C. (2022). Is the kdigo systolic blood pressure target <120 mm hg for chronic kidney disease appropriate in routine clinical practice? *Hypertension*, 79(1), 4–11. <https://doi.org/10.1161/Hypertensionaha.121.18434>

Hartaty, H., & Kurni Menga, M. (2022). Pemberdayaan Masyarakat Melalui Penyuluhan Perilaku Hidup Bersih Dan Sehat Untuk Meningkatkan Derajat Kesehatan Masyarakat. *Abdimas Polsaka*, 1(1), 16–21. <https://doi.org/10.35816/abdimaspolsaka.v1i1.7>

Hermawan, M. H., Miftahurrohma, N., Nurcahyani, P., Abadi, M. D., & Wicaksono, A. Y. (2022). Education of Clean Healthy Living Behavior As an Efforts To Prevent the Spread of the Covid-19 Virus. *Abadi: Jurnal Ahmad Dahlan Mengabdi*, 1(1), 7–11. <https://doi.org/10.58906/abadi.v1i1.54>

Hysa, E., Cutolo, C. A., Gotelli, E., Paolino, S., Cimmino, M. A., Pacini, G., Pizzorni, C., Sulli, A., Smith, V., & Cutolo, M. (2021). Ocular microvascular damage in autoimmune rheumatic diseases: The pathophysiological role of the immune system. *Autoimmunity Reviews*, 20(5), 1–11. <https://doi.org/10.1016/j.autrev.2021.102796>

Kondo, N., Kuroda, T., & Kobayashi, D. (2021). Cytokine networks in the pathogenesis of rheumatoid arthritis. *International Journal of Molecular Sciences*, 22(20), 1–27. <https://doi.org/10.3390/ijms22010922>

Kusuma, A. N. (2022). Community Empowerment through Clean and Healthy Lifestyles to Improve Health Degrees in Indonesian Community. *Jurnal Mantik*, 5(3), 2137–2146. <https://doi.org/10.35335/mantik.v5i3.2822>

Le, T. H. Van, & Kwon, S. M. (2021). Vascular endothelial growth factor biology and its potential as a therapeutic target in rheumatic diseases. *International Journal of Molecular Sciences*, 22(10), 1–17. <https://doi.org/10.3390/ijms22105387>

Li, J., Somers, V. K., Gao, X., Chen, Z., Ju, J., Lin, Q., Mohamed, E. A., Karim, S., Xu, H., & Zhang, L. (2021). Evaluation of Optimal Diastolic Blood Pressure Range among Adults with Treated Systolic Blood Pressure Less Than 130 mm Hg. *JAMA Network Open*, 4(2), 1–13.

<https://doi.org/10.1001/jamanetworkopen.2020.37554>

Marjina, , Singh, A., Sharma, A., Narang, R. K., & Singh, G. (2020). Management of Hypertension with Conventional and Herbals Drugs. *Journal of Drug Delivery and Therapeutics*, 10(3), 280–287. <https://doi.org/10.22270/jddt.v10i3.3998>

Mazhar, S., Rafi, U., & Noreen, A. (2023). Hypertension: Causes, Symptoms, Treatment and Prevention. *Pakistan Biomedical Journal*, 6(4), 16–22. <https://doi.org/10.54393/pbmj.v6i04.858>

Mirjat, A. A., Mirjat, A. A., Naveed, M., Majeed, F., & Chong, S. (2020). Factors Influencing Sleep Quality and Effects of Sleep on Hypertension. *Sleep and Vigilance*, 4(2), 125–136. <https://doi.org/10.1007/s41782-020-00094-5>

Nugrahaeni, F., & Permanasari, E. D. (2021). Edukasi Perilaku Hidup Bersih Sehat dan Pembagian Masker, Handsanitizer kepada Warga Jatisari. *Abdimasku : Jurnal Pengabdian Masyarakat*, 4(1), 1–6. <https://doi.org/10.33633/ja.v4i1.162>

Permata, F., Andri, J., Padila, & Andrianto, M. B. (2021). Penurunan Tekanan Darah Pada Pasien Hipertensi Menggunakan Teknik Alternate Nostril Breathing Exercise. *Jurnal Kesmas Asclepius*, 3(2), 60–69. <https://doi.org/10.31539/jka.v3i2.2973>

Purnamasari, E. F., & Meutia, R. (2023). Hubungan Sikap Dan Motivasi Terhadap Kepatuhan Minum Obat Pada Pasien Penderita Hipertensi Di Rumah Sakit Advent Medan. *Jambura Journal of Health Sciences and Research*, 5(2), 541–549. <https://doi.org/10.35971/jjhsr.v5i2.18581>

Rahmawati, A., Nurmawati, T., & Arsa, S. A. W. (2022). Health Education about Behaviour of Clean and Healthy Life (PHBS) in Household and School. *Journal of Community Service for Health*, 3(1), 19–24. <https://doi.org/10.26699/jcsh.v3i1.art.p019-024>

Rizqoh, D., Djatmiko, E. M., Massardi, N. A., Hakim, A. J., Arifani, N., & Fauzia, A. C. (2023). Health Education About Clean and Healthy Lifestyle Behavior (PHBS) in the Transition Period of the Covid-19 Pandemic for Students. *Dikdimas : Jurnal Pengabdian Kepada Masyarakat*, 2(1), 129–134. <https://doi.org/10.58723/dikdimas.v2i1.93>

Shrestha, J., Marasine, N. R., Lamichhane, R., Marasini, N. R., & Sankhi, S. (2021). Attitude and self-care practice on hypertension among antihypertensive medication users in a tertiary care hospital Nepal. *SAGE Open Medicine*, 9, 1–9. <https://doi.org/10.1177/20503121211040707>

Sudano, I., Suter, P., & Beuschlein, F. (2023). Secondary hypertension as a cause of treatment resistance. *Blood Pressure*, 32(1), 1–9. <https://doi.org/10.1080/08037051.2023.2224898>

Suprapto, S., & Arda, D. (2021). Pemberdayaan Masyarakat Melalui Penyuluhan Perilaku Hidup Bersih dan Sehat Meningkatkan Derajat Kesehatan Masyarakat. *Jurnal Pengabdian Kesehatan Komunitas*, 1(2), 77–87. <https://doi.org/10.25311/jpkk.vol1.iss2.957>

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